

REMARKS

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated April 4, 2007.

In the outstanding Office Action, the Examiner indicated that Figs. 17-24 should be designated as Prior Art illustrations (see item 1 of the detailed action). These illustrations, however, relate to prior efforts/studies made by the applicants in connection with their investigative efforts towards the development of the present invention. Therefore, since these illustrations are not considered as Prior Art according to U.S. practice, it is not necessary to label them as Prior Art illustrations. Accordingly, reconsideration and withdrawal of this requirement is respectfully requested.

The two questioned items with regard to the objection to the Specification, in item 2 of the detailed action, were reviewed and revised accordingly. In view of the remedial action taken directed thereto, withdrawal of this objection is respectfully requested.

Regarding the outstanding objection to the claims under items 4 and 5 of the detailed action, this has been rendered moot in view of the revisions implemented therein. Please note that the revisions in claim 5 carry over also to claim 7 which is dependent thereon, regarding the questioned variable "N". Revisions of a minor formal nature were also implemented in dependent claim 7, in keeping with that suggested under item 5 of the detailed action. In consideration of these claim revisions, withdrawal of the outstanding objection to the claims is respectfully requested.

Regarding the rejection of claim 8 under 35 USC §112, second paragraph, this has also been rendered moot in view of the editorial revision thereto. Accordingly, withdrawal of this rejection is respectfully requested.

By the above made amendments, also, dependent claims 10 and 12 as well as claim 13 were re-presented as independent claims, each incorporating the contents of its corresponding base claim 8 or 11 along with the additional editorial revisions made to conform with the statutory requirements regarding the formulating of claim language. In view of these revisions, previously pending claims 8 and 11 were accordingly canceled. Insofar as presently applicable, therefore, the outstanding rejections under 35 UCS §112, second paragraph, as set forth in items 8 and 9 of the detailed action are traversed and withdrawal of the same is respectfully requested.

Regarding the rejection of claim 10 under 35 USC §112, second paragraph, this has also been rendered moot with the editorial revision made to the questioned expression "over a long period of time" therein.

Incidentally, applicants note with appreciation that independent claim 1 is allowable.

Applicants also note with appreciation the indication that claims 2, 4, 6, 7, 8, 10, 12 and 13 are directed to allowable subject matter and that these claims will also be rendered allowable upon obviating the outstanding objections and/or matters raised under 35 USC §112, second paragraph (see items 18-20 of the detailed action). It is submitted, all previously outstanding issues directed thereto have been overcome in view of the above-made amendments to the claims. Accordingly, favorable action of these claims is also respectfully requested. Regarding dependent claim 2, the objection thereto has been rendered moot in view of the

editorial revision made therein. Since claim 2 is dependent on allowable claim 1, favorable action therefore of claim 2 for the same and similar reasons as that which has rendered claim 1 allowable is also respectfully requested. Regarding claims 10, 12 and 13, it is submitted, since the previously outstanding issues directed thereto have been overcome and noting that these claims are now in an appropriate self-contained format, favorable action therefore is respectfully requested. Also, the representing of claims 6, 7 and 8 in a self-contained format, it is submitted, is not necessary in view of the revisions made to base claim 3 thereof which, it is submitted, renders independent claim 3 as well as the corresponding dependent claims thereof including that of claims 6-8, as currently amended, allowable. Correspondingly, also, applicants also consider claim 5, as currently amended, which also depends on claim 3, to be allowable. Supportive discussion regarding this is given below.

I. Rejection of claim 3 under 35 USC §102(b), allegedly, as anticipated by applicants admitted prior art.

A featured aspect of the invention according to claim 3, as currently amended, is that a phase comparator operates such as shown in Fig. 4, which is consistent with claim 3 (e.g., see 103 in Fig. 1, etc. of the present application). That is, the phase comparator outputs a DOWN signal to set forward the phase of a data recovery clock when a rising edge is detected in window "A" of a certain period in the direction setting forward a data recovery clock signal, and outputs an UP signal to delay the phase of a data recovery clock when a falling edge is detected in window "B" of a certain period in a direction of a delayed data recovering clock signal. It can be said therefore, that control is effectively realized. That is, in accordance with

claim 3, the phase comparator is controlled so that an edge of the recovered clock signal is kept away from the edge of an input data, consistent with that also of allowed claim 1.

It is submitted, the control of the comparator, according to the invention set forth in claim 3, is quite different than that from the comparator 1903 in Fig. 19, which can be explained with regard to Fig. 23 of the drawings. The above described featured aspects are now clearly set forth within amended independent claim 3. It is submitted, therefore, that the invention according to independent claim 3 could not have been anticipated in the manner alleged in the outstanding rejection thereto, at least for the above discussed reasons. Accordingly, insofar as presently applicable, this rejection is traversed and withdrawal of the same is respectfully requested.

II. Rejection of Claim 5 under 35 USC §103(a), allegedly, over Dally et al (USP 2003/0086339 A1) in view of Lee et al (US 2002/0085656 A1).

Applicants submit, the invention according to claim 5, which depends on claim 3, is also allowable for the same and similar reasons as that described with regard to the above rebuttal to the art rejection to claim 3. It can be said, it is noted that the phase comparator of the present invention, arguably, may be considered as having some similarity to the multiplexer in Fig. 9 of Lee et al only with regard to the selecting of a clock from N phase clocks which have a different phase from each other. It is submitted, nonetheless, that claim 5 is allowable in view of the revisions implemented in base claim 3 thereof, which clarify that the UP signal and DOWN signal (according to claim 3) are applied in connection with the selection of a clock from plural clocks.

The control of adjustment of recovery clock phase such as described in Dally et al concerns an edge-tracking method that is different from that according to claim 3. Although Dally concerns providing an adjustment to the phase of a clock, it is a different approach from that as presently set forth in claim 3. For at least the above reasons, one of ordinary skill could not have achieved a clock data recovery scheme as that called for in claim 5 (combined with base claim 3) over the combination of Dally et al and Lee et al in the manner alleged in the outstanding rejection. Therefore, insofar as presently applicable, this rejection is traversed and withdrawal of the same is respectfully requested.

III. Rejection of Claims 9 and 11 Under 35 USC §102(a), allegedly, as anticipated by Dally et al.

This rejection has been rendered moot with the canceling of these claims. The canceling of these claims should not be construed as acquiescence with regard to the merits of this rejection.

Therefore, in view of the above-made amendments, together with these accompanying remarks, withdrawal of the outstanding objections/rejections as well as favorable action on the currently pending claims, i.e., claims 1-8, 10, 12 and 13, and an early formal notification of allowance of the above-identified application is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP

Deposit Account No. 01-2135 (Docket No. 520.43305X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
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